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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,961	01/15/2002	Takashi Yamaoka	020569	3092

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EXAMINER	
DUONG, THOI V	

ART UNIT	PAPER NUMBER
2871	

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/044,961	YAMAOKA ET AL.	
	Examiner	Art Unit	
	Thoi V Duong	2871	

-- Th MAILING DATE of this communication appears on the cover sh et with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 25 August 2003.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-26 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-26 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This office action is in response to the Amendment filed August 25, 2003.

Accordingly, claims 1 and 6 were amended, and new claims 11-26 were added. Currently, claims 1-26 are pending in this application.

Response to Amendment

2. The Declaration filed on 08/25/2003 under 37 CFR 1.131 is sufficient to overcome the Kitagawa et al.'s reference (Pub. No. US 2002/0140882 A1). However, upon further consideration, a new ground(s) of rejection is made in view of JP 11-231130 and USPN 4,229,498 of Suzuki et al..

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 14-18 and 20-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kameyama et al. (USPN 6,342,934 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As shown in Fig. 3, Kitagawa et al. discloses a laminated optical device comprising:

a polarizing layer 3 having a thickness of 5 micrometers (col. 11, lines 43-62); and

a birefringent layer 1 laminated on said polarizing layer and including a polymer layer containing oriented liquid crystal (col. 3, lines 15-31),

wherein said polarizing layer and said birefringent layer are superposed closely on each other through an oriented film 2(21) (col. 19, lines 35-43);

wherein said birefringent layer contains a discotic or nematic liquid crystal oriented planarly horizontally or thicknesswise obliquely (col. 3, line 63 through col. 4, line 64); and

wherein said birefringent layer contain a nematic liquid crystal (col. 18, lines 28-32), which can be inherently oriented at an angle of more than 0 degree or more.

The laminated optical device having two opposite surfaces also comprises at least on adhesive layer disposed on one or each of the opposite surfaces (col. 17, lines 22-31 and col. 18, lines 15-27).

The laminated optical device further comprises a luminance-enhancement film laminated (col. 18, lines 36-42) or a luminance-enhancement film 5 shown in Fig. 8 (col. 14, lines 31-33).

Furthermore, as shown in Fig. 8, Kameyama et al. discloses a liquid-crystal display apparatus comprising:

a liquid-crystal display panel 6; and

at least one laminated optical device defined above and disposed on one of opposite surfaces of said liquid-crystal display panel.

Finally, with respect to claims 25 and 26, as to the product-by-process limitation "wherein said birefringent layer is coated directly on said polarizing layer" of the claim, it has been recognized that "Even through product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process". *In re Thorpe*, 227 USPQ 964,966 (Fed. Cir. 1985). See also MPEP 2113.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being obvious over Kameyama et al. (USPN 6,342,934 B1) as applied to claims 14-18 and 20-26 above in view of Khan et al. (USPN 6,049,428).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Kameyama et al. discloses a laminated optical device that is basically the same as that recited in claims 13 and 19 except for said polarizing layer made of one member selected from the group consisting of a lyotropic liquid-crystal dichromatic dye, a dichromatic dye-containing liquid crystal polymer and a dichromatic dye-containing lyotropic substance. Khan et al. discloses a dichroic light polarizer having high polarization characteristic by using a dye capable of forming lyotropic liquid crystals (col.

2, lines 43-67). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the laminated optical device of Kameyama et al. with the teaching of Khan et al. by forming said polarizing layer made of a lyotropic liquid-crystal dichromatic dye so as to obtain a polarizing layer with high polarization characteristic.

7. Claims 1, 3-12, 14-18 and 20-26 are rejected under 35 U.S.C. 103(a) as being obvious over JP 11-231130 (JP'130) in view of Suzuki et al. (USPN 4,229,498).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned

by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

As shown in Fig. 3, JP'130 discloses a laminated optical device comprising:

a polarizing layer 3 having a thickness of 5 micrometers (paragraph 51); and

a birefringent layer 1 laminated on said polarizing layer and including a polymer layer containing oriented liquid crystal (paragraph 10),

wherein said polarizing layer 3 and said birefringent layer 1 are superposed closely on each other through an oriented film 2(21) (paragraph 41); and

wherein said birefringent layer contains a discotic or nematic liquid crystal oriented planarly horizontally or thicknesswise obliquely, cholesteric liquid crystal oriented in a Granjean texture, and liquid crystal nematically oriented at an angle of 0 degree (no twist) or more than 0 degree (twist) (paragraphs 12, 13, 16).

The laminated optical device having two opposite surfaces also comprises at least on adhesive layer disposed on one or each of the opposite surfaces (paragraphs 68-73).

The laminated optical device further comprises a luminance-enhancement film 5 shown in Fig. 5 (paragraphs 65-67).

Finally, as shown in Fig. 6, JP'130 further discloses a liquid-crystal display apparatus comprising:

a liquid-crystal display panel 6; and

at least one laminated optical device defined above and disposed on one of opposite surfaces of said liquid-crystal display panel.

JP'130 discloses a laminated optical device that is basically the same as that recited in claims except for a polarizing layer having a thickness of less than 5 micrometers. Suzuki et al. discloses a polarizing layer having excellent heat stability and humidity resistance (col.1, lines 4-6) with a thickness of from 1 micrometer or larger (col. 3, lines 28-30). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the laminated optical device of JP'130 with the teaching of Suzuki et al. by forming a polarizing layer of a thickness of less than 5 micrometers so as to obtain a polarizing layer with excellent heat stability and humidity resistance.

With respect to claims 25 and 26, as to the product-by-process limitation "wherein said birefringent layer is coated directly on said polarizing layer" of the claim, it has been recognized that "Even through product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process". *In re Thorpe*, 227 USPQ 964,966 (Fed. Cir. 1985). See also MPEP 2113.

8. Claims 2, 13 and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over JP'130 in view of Suzuki et al. (USPN 4,229,498) as applied to claims 1, 3-12, 14-18 and 20-26 above and further in view of Khan et al. (USPN 6,049,428).

The laminated optical device) of JP'130 as modified in view of Suzuki et al. above includes all that is recited in claims, 2, 13 and 19 except for the polarizing layer

made of one member selected from the group consisting of a lyotropic liquid-crystal dichromatic dye, a dichromatic dye-containing liquid crystal polymer and a dichromatic dye-containing lyotropic substance. Khan et al. discloses a dichroic light polarizer having high polarization characteristic by using a dye capable of forming lyotropic liquid crystals (col. 2, lines 43-67). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the laminated optical device of JP'130 with the teaching of Khan et al. by forming the polarizing layer made of a lyotropic liquid-crystal dichromatic dye so as to obtain a polarizing layer with high polarization characteristic.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (703) 308-3171. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (703) 305-3492.

Thoi Duong

11/12/2003

T. Chowdhury
Primary Examiner